

Come **Ride** *The* **Rails**

Guidebook



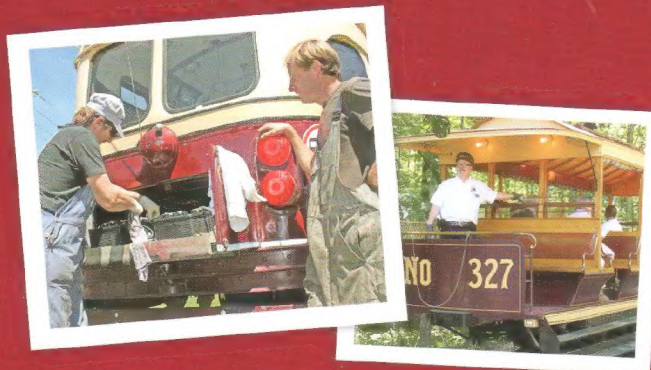
Ontario's only Operating Streetcar Museum!





Our Mission

To collect, preserve, restore, operate and display electric railway-related objects, and interpret their historical significance through the operation of the Halton County Radial Railway.



The production of this book was generously funded by the Ontario Trillium Foundation and produced by the Ontario Electric Railway Historical Association, operators of the Halton County Radial Railway, a non-profit, educational organization.

This book was edited by Gordon F. McOuat, Caroline Rose and Tom Twigge-Molecey.

THE ONTARIO
TRILLIUM
FOUNDATION



LA FONDATION
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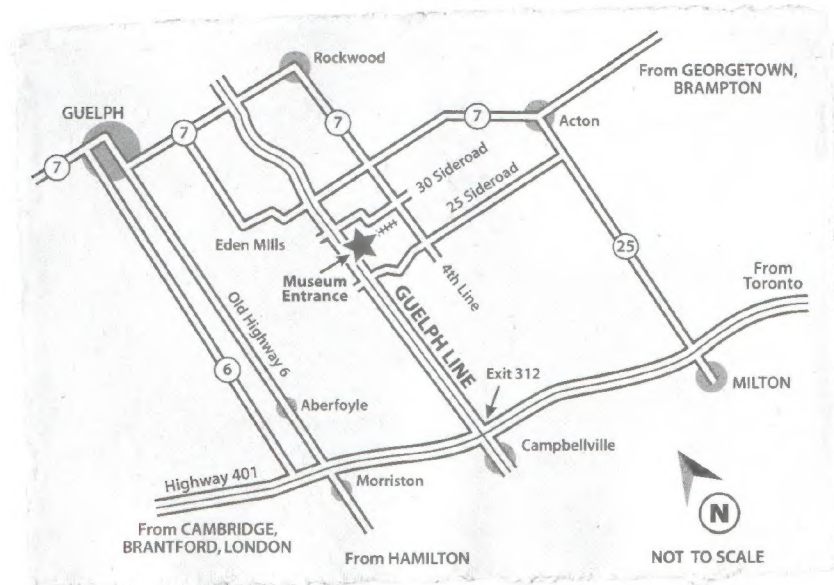


The Halton County
railway museum.
Association Inc. (K

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Welcome to an unusual museum.



The Halton County Radial Railway (HCRR) is Canada's largest, and Ontario's only, operating electric railway museum. The museum is owned and operated by the Ontario Electric Railway Historical Association Inc. (OERHA), which is a federally registered not-for-profit educational organization.

The essence of transportation is movement; therefore the museum is not a collection of artefacts locked in glass cases, but rather a full-size operating railway. By actually having the opportunity to ride on vintage railcars, the history of electric railway transportation can be experienced in its proper context for generations to come.

As a historical corporation without share capital, donations to the Association are income tax deductible. The Association is completely self-governing and not affiliated with any level of government or private corporation. The Halton County Radial Railway is a demonstration railway and is not a common carrier.

Chronology

December 1953	Group organized	September 1976	Car house #2 completed with Wintario Grant
June 1954	First two cars delivered on site	December 1977	West yard (tracks 21-23) completed
August 1955	Car house #1 construction started	September 1980	Visitors' Reception Centre Gift Shop completed
June 1961	Association reorganized	Fall 1983	Car house #3 and machine-shop addition to car house #2 completed
February 1962	Incorporation completed	September 1984	Turning loops opened. Mainline now complete
December 1962	First west-end land purchase	Summer 1986	Car house #3 yard completed. Overhead installed
May 1963	First HCRR operation with rail truck M-6	Summer 1988	East end landscaping and rock garden completed
July 1965	Substation completed	September 1994	Third Association of Railway Museums convention held
January 1966	13 acres of land leased at east end (purchased 1977)	Winter 1997	New machine shop building constructed
November 1967	First overhead line poles erected	August 1997	L&PS 8 restoration completed after 13 years
July 1968	Final unit of car house #1 completed	Spring 1999	Track 24 construction started
September 1968	Overhead bracket-arm installation started	September 2001	327 participates in TTC's 80th Anniversary in Toronto
May 24, 1971	First electric car 327 operated	Fall 2001	Track 24 completed and overhead installed
August 1971	Second west-end land purchase (10 acres)	2002	Substation upgrade completed
September 1971	Mainline completed to yard switch	Fall 2003	Car house #4 site graded
October 1971	Station moved from CNR Rockwood	Fall 2004	Track 37 right-of-way completed, track 37 and yard 4 track constructed
June 1972	Completed installation of mainline trolley wire	May 2006	Railcars received for Archives Facility from CPR
June 25, 1972	Official opening of museum	October 2007	Archives facility completed and officially opened
November 1972	First body acquired for restoration (416)		
February – September 1973	Six cars acquired in year (3, 4, 335, 521, 2786, S-37)		
June 7, 1973	Historic Plaque unveiling. The Archaeological & Historic Sites Board of the Archives of Ontario		

Introdu



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Introduction



While largely forgotten today, the electric railway was the unsung hero of urban growth throughout the early 20th century. Prior to the days of arterial roads and two automobiles per household, electric urban transit was an absolute necessity for the development of cities, their suburbs and their overall economic viability.

Long before the private automobile was even a realistic option, networks of electrified trolley cars transported thousands of workers to and from work each day. While the early electric cars of the 1890's were little more than boxes on four steel wheels, they paved the way for what was to become the fundamental cornerstone of modern railways and rapid transit. The inherent efficiency of steel wheels on steel rails was realized with the construction of the first railways in the mid-19th century, but it wasn't long before this efficiency was scaled down for urban use.

The first successful electric railway operation in Canada (and arguably North America) took place at the Canadian National Exhibition (CNE) in 1885, when Charles Van de Poele demonstrated a quarter mile railway powered entirely by electricity from an overhead power line. While the machine was crude and unreliable it showed the potential of electric traction. By 1891 the design had been refined to the point that, while still crude, electric trolleys were viable.

The first electric streetcar in Toronto entered regular service on the Church line in 1892. In the decade that followed, Toronto's entire streetcar system was electrified and expanded. By the turn of the century, suburban and interurban rail lines began to develop across Canada. These lines tended to radiate from urban centers outwards, much like the spokes on a bicycle wheel; hence the term "Radial Railway" was born.

Between 1900 and 1920 vast enhancements in electric traction design and construction were made and Ontario had a booming electric railway industry. Not only were there dozens

of urban and suburban systems, but there were also no less than 10 full-time electric railcar manufacturers and hundreds of component manufacturers. Familiar names like Westinghouse, General Electric, WABCO and Bombardier and their predecessors all had significant manufacturing operations in Ontario.

Throughout the 1920's the introduction of the mass produced private automobile initiated the demise of most systems. While many held on until the 1950's, the die was cast as the population became more mobile and less interested in public transit. The lone exception to this trend in Ontario was Toronto where the Toronto Transit Commission (TTC) has been continuously operating electric streetcars for 115 years and most of it along the same routes.

While most urban systems shut down or converted to buses, several of the suburban systems continued to operate electric freight right up into the late 1950's. The last full-scale electric freight operation in Ontario was INCO's 200 mile in-house transfer railway in Sudbury. It ceased electric operation in 2001.



While electric railways may seem a thing of the past, it is worth noting that the traction systems developed for them formed the basis for almost all of today's diesel locomotives (which still use electric motors powered by their own diesel generator) modern subway and rapid transit equipment, and Europe and Asia's high speed passenger trains.



MUSEUM

The Ontario Electric in December 1954. Up until that time historic streetcars space constraints would have been

With fierce determination, the five y starting what was the largest electric railway sole purpose of providing vehicles in the TTC the winter of 1954 expended search salvaging scrap train help from their friends.

By a stroke of luck searching, the group suitable piece of scrap afford. It was a thrill an abandoned electric outside Rockwood was available for property taxes.

The parcel of land the Toronto Suburban The TSR was consistently operated from The Toronto to Guelph to major freight line Canadian Pacific Railway in 1931 and dism

In June of 1954 the cars 1326 and 221 delivered to the site section of track. The process of development assistance. By 1966 officially incorporated Southern Counties well underway on the elements.

MUSEUM HISTORY

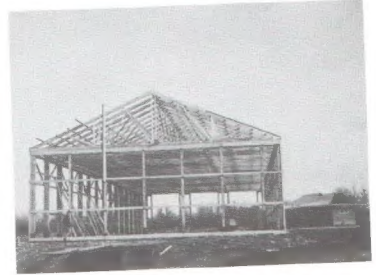
The Ontario Electric Railway Historical Association (OERHA) was founded at a New Years Eve party in December 1953 by five young Torontonians with a passionate interest in urban transit history. Up until that time, the Toronto Transportation Commission maintained a small collection of historic streetcars and early transit vehicles, including an omnibus, stagecoach and sleigh. Due to space constraints, the TTC opted to disband its collection and, without a home, these cars surely would have been scrapped.

With fierce determination and unwavering resolve, the five young men set about starting what would become Canada's largest electric railway museum with the sole purpose of preserving the two largest vehicles in the TTC's collection. Throughout the winter of 1954 a significant effort was expended searching for a piece of property, salvaging scrap track materials and soliciting help from their friends.

By a stroke of luck and many months of searching, the group managed to find a suitable piece of property they could afford. It was a three acre parcel of an abandoned electric railway line outside Rockwood, Ontario, which was available for the payment of back property taxes.

The parcel of land was a small piece of the Toronto Suburban Railway (TSR). The TSR was constructed in 1915 and operated from The Junction in West Toronto to Guelph. The line proved unsuccessful as it ran parallel to major freight lines operated by the Grand Truck and the Canadian Pacific Railways. The line was abandoned in 1931 and dismantled.

In June of 1954 the dream was realized when TTC cars 1326 and 2210 (Toronto Civic car 55) were delivered to the site and unloaded on a short section of track. This began the seemingly endless process of developing a museum with little outside assistance. By 1961, when the Association was officially incorporated, the fleet included Montreal & Southern Counties suburban car 107 and work was well underway on a car barn to protect the cars from the elements.





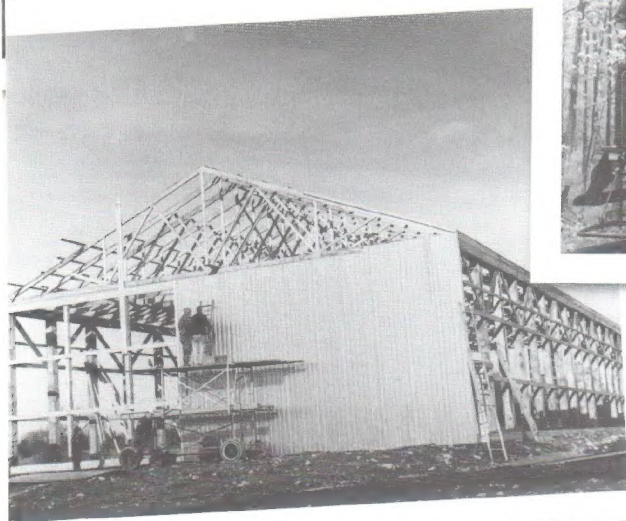
Throughout the 1960's construction of the car barn continued, as well as the grading of the old roadbed and construction of track. Additional property was purchased and leased, and the line extended west reaching a mile through the bush by 1971. Poles were installed in the original locations and trolley wire salvaged from Oshawa and reinstalled. The first electric operation took place on May 24, 1971 when car 327 operated under its own power.

The museum officially opened to the public on June 25, 1972 and has been in continuous operation ever since. More vehicles were acquired and two more carhouses built along with a gift shop

and machine shop. The former Grand Trunk Railway station from Rockwood was relocated to the site and to this day is used for dispatching cars. The collection and infrastructure has grown well beyond the dreams of the original founders, but the museum remains true to their vision. When the Association celebrated its fiftieth anniversary in 2004, seven of the eight founding members were in attendance to commemorate the event.

TIMING IS EVERYTHING

Unfortunately, most of the electric railways in Ontario were gone before the Association was founded. With the limited resources available during the first few years it wasn't possible to preserve much of the remaining electric railway equipment from many of the smaller systems, which were in the process of shutting down. However, a number of cars weren't scrapped upon retirement. Alternatively, they were stripped of useable components and converted into dwellings.



Throughout the last for many of these "bodies" to their former glory.

Everything about elec cases, acquiring a rail straightforward. Howe the real work begins. Indeed, when London Association had to wa a suitable truck was at the museum. Once c preservation and hou Current costs for insid per track foot. For an 50' long that equate \$22,000. Hence, it sim feasible to get everyth

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GETTING INV

The Association is o volunteers. All reven the museum is reinv and development. W a significant amoun years in the form of c on admission reven corporations have r material donations. The main corporati listed in the back of asset the museum h members and volun and always seem to were thought to be

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Throughout the last forty years, the Association has acquired as many of these "bodies" as possible with the goal of restoring them to their former glory.

Everything about electric railways is big and expensive. In many cases, acquiring a railcar or body is relatively inexpensive and straightforward. However, once the car is purchased or acquired the real work begins. Just transporting railcars is a challenge. Indeed, when London & Port Stanley 8 was acquired in 1968, the Association had to wait until 1971 before a suitable truck was available to ship it to the museum. Once on site, the cost of preservation and housing is significant. Current costs for inside storage are \$450 per track foot. For an average size railcar 50' long that equates to more than \$22,000. Hence, it simply isn't economically feasible to get everything inside right away.

A significant effort has been expended over the years to collect spare components and parts such as trucks, controllers, brake equipment and interior fittings. As time and finances allow, these seemingly derelict railcars will be restored to operating condition. The remarkable transformation of London Street Railway car 23 is a good example of how these cars can be restored. From a gutted change room at a skating rink, into a fully restored operating car, it is easy to realize what is possible with dedication, perseverance and a little financial assistance.

GETTING INVOLVED

The Association is owned and operated entirely by volunteers. All revenue derived from the operation of the museum is reinvested in the museum's operation and development. While the Association has received a significant amount of financial assistance over the years in the form of capital grants, it still relies entirely on admission revenue and donations. A number of corporations have made significant financial and material donations to the museum over the years. The main corporations over the past 50 years are listed in the back of this book. The most significant asset the museum has, other than the collection, is its members and volunteers. They are dedicated, selfless and always seem to find ways to achieve things that were thought to be impossible.



Sandra Traversy



Dave Barrett



Dave Barrett



Dave Barrett

Membership is open to anyone with an interest in railways, history, or anyone who has a willingness to get involved. Most Association members are not connected with the railway or transportation industry, but are united by a desire to do something constructive and to accomplish together what could not be done alone. The Association's members contribute tens of thousands of volunteer hours of their time each year. Every contribution, no matter how seemingly insignificant is appreciated.

The Association is always actively seeking new members and volunteers. Much of the museum's development pace is tied directly to member involvement. Many members choose to simply support the museum financially, while many others prefer to "get their hands dirty" at the museum.

HOW DID ALL OF THIS GET PAID FOR?

As the museum was founded, everything was paid for by "passing the hat." For over a half century this practice continues today when funds are needed. Revenue derived from the museum operation covers day-to-day expenses such as taxes, hydro, insurance and summer staff salaries. However, all significant infrastructure development was funded by donations, both from our members and the public.

Both of the museum's large carbarns were largely financed by Federal grants and the museum's recent infrastructure development has largely been supported by grants from the Milton Community Fund and the Ontario Trillium Foundation.

Corporations continue to donate equipment, parts, supplies and expertise. We are particularly grateful to the Toronto Transit Commission, which has supported the museum through donations of equipment and parts for more than half a century.

We are also indebted to all of our members and supporters for their assistance in the past, present and future.



Street



Toronto
(1893)

Built by: T

Desc.: SE

Built: 189

Retired: 1

Arrived: 1

Donated



Streetcars



Dave Barrett



City of Toronto Archives

Toronto TTC 327 (1893)

Built by: TTC
Desc.: SE ST Bench Open
Built: 1893, rebuilt in 1934
Retired: 1915
Arrived: 1968
Donated by: TTC in 1968

The original 327 was built in 1893 and operated until 1915 when side running boards were banned in street operation. It was then stored and eventually scrapped. In 1934, to mark the centennial of the City of Toronto, the TTC built a new 327 following the original plans closely and using original mechanical and electrical parts. It is quite rare, as only two or three other four-wheeled open cars are in existence in Canada today. It has a "Montreal" truck, made in its namesake city. So far as is known, this is the only remaining example of this early "made in Canada" equipment, as its manufacture ended before the turn of the century.

Car 327 was donated by the TTC in 1968 and was the first electric car to move under its own power at the museum on May 24, 1971. It returned to the streets of Toronto on September 9, 2001 to lead the parade of vehicles for the TTC's 80th Anniversary celebrations.



**London Street
Railway 23
(1901)**

Built by: Montreal Park &
Island Railway

Desc.: SE DT Open, 15 Bench

Built: 1901

Retired: 1935

Arrived: 1983

Donated by: Wonderland
Gardens Limited, London

This unusual car, (one of five), was built in 1901. This group of cars of 43'6" length and 15 benches were probably built in the Montreal Park & Island Railway shops. They started to arrive in London, Ontario by the CPR on April 4, 1901

The cars handled excursion traffic to Springbank Park and were rarely, if ever, used on any other line. They were kept in summer use until 1935.

The body of car 23 was used for almost a half century as a men's change house for a swimming pool at Wonderland Park until obtained by the museum in 1983. Note that the left side was built "closed", a feature rarely found outside Canada. The horizontal placement of the sheathing is very unusual. After a twenty-year restoration the car is now operational again.



**Toronto TCI
TTC 2210
(1915)**

Built by: Preston

Desc.: ST DE Arc

Built: 1915

Retired: 1954

Arrived: 1954

Purchased from
in 1954



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Toronto TCR 55 TTC 2210 (1915)

Built by: Preston Car & Coach Co.

Desc.: ST DE Arch Roof

Built: 1915

Retired: 1954

Arrived: 1954

**Purchased from the TTC
in 1954**

This was the Association's second car to arrive at the museum. It was built in 1915 for the Landsdowne North Line of the Civic Railways, a city-owned predecessor of the TTC. The body form is the rear-entrance "Pay As You Enter" style developed in Montreal in 1905 and later used all over the world. The idea of having the conductor stationed in one spot instead of following a passenger to his/her seat to collect the fare was considered revolutionary at the time. Built without air brakes, these cars were withdrawn in 1926. At this time the car became car 2210. All were scrapped or converted for other purposes (see rail grinder W-28) and only car 55 is now in its original form.

The car was purchased from the TTC in 1954 as a snow scraper and restored to passenger service at the museum. It is quite possible that this car and L&PS car 8 were both in work at the Preston Car & Coach Co. plant at the same time. A greater contrast between the cars is hard to imagine. The truck is a Brill 21-E, which is probably the most widely used type of single truck ever developed.



Dave Barrett

Toronto TRC TTC 1326 (1910)

Built by: Toronto Railway Co.

Desc.: Class (B) DT SE Deck Roof

Built: 1910

Retired: March 30, 1951

Arrived: 1954

Donated by: TTC

This is the only survivor of 461 convertible double truck cars built by the Toronto Railway Co. at Front and Frederick streets between 1903 and 1917; 1326 dates from 1910. During the early years, it was not uncommon for systems to manufacture their own vehicles. Originally the right side of the car was removable in panels for operation as an open car. The former top step is visible along the side. The car has been rebuilt three times and assumed its present appearance in 1932.

Donated by the TTC in 1954, this car was the first restoration undertaken at the museum. Upon completion, it was exhibited at the 1978 Canadian National Exhibition. It has a special status among our members because the museum was founded to save it from being scrapped. Since it is the Association's first car it is ordinarily reserved for operation only on special occasions.

Toront (1913)

Built by: T

Desc.: SE S

Built: 1913

Retired: 19

Arrived: 19



Photo courtesy of the Ontario Electric Railway Historical Association

- Cars
- Streetcars
- Trolleys
- Trams
- Light Rail
- Rapid Transit
- Heavy Rail
- Commuter Rail
- Intercity Rail
- High-Speed Rail
- Light Rail
- Rapid Transit
- Heavy Rail
- Commuter Rail
- Intercity Rail
- High-Speed Rail



Toronto TRC TTC 1704 (1913)

Built by: Toronto Ry. Co.

Desc.: SE ST Deck Roof

Built: 1913

Retired: 1961

Arrived: 1962

Car 1704 was built by the Toronto Railway Co. in 1913 as a smaller version of car 1326. This car still has the short vestibule platforms, which were lengthened on the larger cars around 1920. It is equipped with hand brakes.

The car was withdrawn from passenger service in 1925 and converted to a double-end rail grinder and renumbered W 25. It was used to grind surface irregularities on the rails, primarily at car stops until it was retired in 1961. The car was bought for the museum and shipped to the property in 1962. The truck is a Curtis design rarely used outside Toronto.



Glen Franks

Toronto TTC 2424 (1921),

2984 (1923) "Large Witts"

Built by: Canadian Car & Foundry

Desc.: SE DT Arch Roof
Large Witt

Built: 1921, 1923

Retired: 1961, 1954

Arrived: 1962, 1981

Car 2424 purchased from
a Scrap Dealer

Car 2984 purchased from
a Family Estate

Our center-door "Peter Witt" cars represent the workhorses of the Toronto system between the wars. The TTC had 350 of them, but only a handful was used elsewhere in Canada. The type is named after Peter Witt, an official of the Cleveland Railways Co., who patented the fare-collection system associated with the center door. The "Large Witts" were the cars that began the modernization of Toronto's street railway in 1921 and were so much wider than earlier cars, like 1326, that all tracks in the city had to be rebuilt with wider separation to permit them to pass. Car 2984 was part of the last order built in 1923, both orders by Canada Car & Foundry Co. of Montreal.

Car 2424 was rebuilt for one-man operation in 1941. Car 2984 remained in its two-man configuration and was used on the Yonge line until it retired when the subway opened in 1954. Car 2424 is equipped with Canadian Westinghouse electrical components, while 2984 was equipped with English Electric motors and Dick Kerr controls. Car 2424 was purchased from a scrap dealer in 1962. It was leased to the TTC as a tour tram from 1975 to 1990. The body of 2984 became a summer cottage until it was purchased and shipped to the museum in 1980.

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Emily Thompson

Toronto TTC 2786 (1922),

2894 (1923) "Small Witts"

Built by: Canadian Car &
Foundry (2786);
Ottawa Car Co. (2894)

Desc.: SE DT Arch Roof
Small Witt

Built: 1922, 1923

Retired: 1963

Arrived: 1973 (2786),
1986 (2894)

The "Small Witts", as they came to be known, were slightly scaled down versions of the original design. Unlike the Large Witts, they were not equipped with couplers and could not pull trailers. Both cars are virtually identical in appearance, although they were built by different manufacturers. They were used on lighter carlines and remained in service until the University subway line opened in 1963. Both cars remained in Toronto for occasional charter use after the balance of the fleet was retired and 2894 entered Tour Tram service in 1975.

While originally built as two-man cars, both were converted to one-man "Pay As You Enter" in 1933. Car 2894 has been fully restored to its 1936 appearance, while car 2786 remains in its "as retired" configuration.



TTC 2375, an example of a two door trailer similar to car 2395

Toronto TTC 2395 (1921)

Built by: Canadian Car &
Foundry

Desc.: SE DT Arch Roof Trailer

Built: 1921

Retired: 1938

Arrived: 1983

In conjunction with the TTC's initial purchase of 100 Large Witts in 1921 (cars 2300-2498), a fleet of trailers were also constructed. These were technically not "Witts" because they had only a center door, but they were still called Witt trailers. Trailer trains were used in regular service on heavy lines such as Yonge, Queen and Kingston Road. Having only two doors, they proved very inefficient for loading and unloading, so subsequent trailers had three doors.

With the introduction of the PCC car in 1938, the TTC retired the entire fleet of two-door trailers. Three-door trailers remained in service until the Yonge subway opened in 1954.

After being used as a cottage for nearly half a century, car 2395 was acquired for restoration. It is thought to be the only two door trailer in existence.

**Oshawa
(1923)**

Built by

Desc.:

Built: 1923

Retired

Arrived



Car 83 shown, which is identical to 82.

Oshawa Railway 82 (1923)

Built by: Ottawa Car Company

Desc.: DE DT Arch Roof

Built: 1923

Retired: 1940

Arrived: 1985

This car was built by the Ottawa Car Company as part of the last order of wood-body streetcars built in Canada (apart from some short-lived wartime emergency cars in Montreal) it was technological y almost ten years out of date when it was new. Originally built as a rear entrance car, it was rebuilt for one man pay as you enter operation in 1928 and operated until streetcar service on the Oshawa Railway was discontinued in 1940. It was transferred to the Niagara, St. Catharines & Toronto Railway (line Oshawa, a CN subsidiary) and was actually shipped to St. Catharines, but never re-entered service.

The car was retired and shipped to Niagara Falls where it was used as a summer house until it was shipped to the museum in 1985. The car is presently only a body, but virtually all of the electrical and mechanical components have been gathered up over the years. However, the car will eventually be restored to operating condition.



Hamilton Street Railway 521 (1927)

Built by: National Street Car

Desc.: DT SE Arch Roof

Built: 1927

Retired: 1951

Arrived: 1975

Purchased in 1975

The 48 cars of Hamilton's 500-series, built in 1927-29, were typical city cars of the period and very similar to cars in Regina, Calgary, Quebec, Montreal and elsewhere. The Hamilton cars were unusual in one respect: the main side plates are on the inside and the exterior finish is a laminated material called "Plymet." The space between the side plates and the side plates were filled with insulation.

At first these were two-man cars with the conductor standing behind the motorman, but before long one-man crews were used, for which the cars had been intended from the beginning. The cars were equipped with brass window sash, which was an improvement that came just too late for Toronto's Witts.

Car 521 was retired in 1951, but not scrapped as most of the 500s were. Instead it was sold for use as a farm shed until acquired for the museum in 1973. Since these cars had many components in common with Toronto Witts, it will be rehabilitated with many parts from car 2806.

Toronto (1938)

Built by: St. L.
Canadian Car

Desc.: DT SE

Built: 1938

Retired: 1969

Arrived: 1969

Donated by:



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Ian Harris

Toronto TTC 4000 (1938)

Built by: St. Louis Car/
Canadian Car & Foundry Co.

Desc.: DT SE Air-Electric PCC

Built: 1938

Retired: 1968

Arrived: 1969

Donated by: TTC

Development of the PCC car began in 1929 and full-scale production commenced in 1936. Toronto made its initial purchase in 1938. Car 4000 was Canada's first PCC car and the first of what became the largest fleet of PCC cars in North America (total was 745 units). This was quite significant at the time because no other Canadian city had more than a handful. The cars were a result of considerable improvement of traditional street railway equipment and were truly innovative.

Car 4000 is an air-electric car, wherein the holding brakes, doors, sanders and wipers were air operated. Later design refinements led to the development of an all-electric car, which had no need for air equipment. The car operated in revenue service until 1963 when it was withdrawn and used as a training car. It was retired in 1966 and donated to the museum in 1968. It is the only surviving Toronto air-electric PCC car.



Torn Twigg Morency

Toronto TTC 4386, 4426, 4684

Built by: St. Louis Car Co./
Canadian Car & Foundry

Desc.: DT SE Al Electric PCC

Built: 1948, 1949, 1946

Retired: 1990, 1982, 1982

Arrived: 1990, 1982, 1982

Donated by: TTC

Beginning in 1948, the TTC purchased 250 new all-electric PCC cars, which were divided into three classes. The 4300 series were standard cars. The 4400 series were basically identical to the 4300s except they were equipped with multiple unit controls and couplers and could be operated in trains. The 4500 series cars were the TTC's last order of new PCCs delivered in 1951.

Between 1971 and 1975, the TTC completely rebuilt 173 of the 250 all-electric cars for extended service. Car 4386 was rebuilt in 1973, while car 4426 was never rebuilt and was among the last un-rebuilt cars to be retired in 1982. Like 4000, the 4300-4549 series is a joint effort of the St. Louis Car and Canadian Car & Foundry Co.

The TTC also purchased 205 second hand PCCs from four American systems. Among this second fleet were 25 cars in the 4675-4699 series. Car 4684 was built in 1946 as Louisville Railway Co. car 509, but before delivery the company changed its mind and the 25 cars were traded to the Cleveland Transit System for buses. It then became car 4259 in Cleveland. In 1952 all Cleveland cars were sold to the TTC, which added M.U. controls and used them in train service on Bloor and Queen. Unlike the TTC's new cars, car 4684 is a 100 per cent St. Louis Car Co. product.



**Toronto TTC 4600,
4611, 4618
(1951)**

Built by: St. Louis Car. Co/
Canadian Car & Foundry

Desc.: DT SE Upgraded
All-Electric PCC cars

Built: Originally in 1951,
rebuilt 1972-75, Final Rebuild
1986, 1991, 1993

Retired: 1995

Arrived: 1996

4600, 4618 Donated by TTC

**4611 Purchased from
T. Twigge-Molecey**

Car 4600 was the prototype for the class A-15 PCC rebuilding program of the late 1980s. Originally numbered 4505, car 4600 was completely rebuilt by the TTC and outshopped in 1986. The rebuilding of a further 18 cars began in 1988 with car 4618 being the last car completed in 1993. The cars operated in rush hour service until December 1995 when the entire fleet was retired. Car 4611 was the last PCC car to operate in revenue service.

The cars were originally built in 1951 as the 4500-4549 series that was classed A-8. The cars were assigned to St. Clair division until it closed in 1978 when they were transferred to Russell and Roncesvalles Divisions. At least one of the A-8 class cars was rebuilt in the 1970s heavy rebuild program.

Suburban/Interurban Cars



Montreal & Southern Counties 107 (1912)

Built by: Ottawa Car & Mfg. Co. Limited

Desc.: DT DE RR Roof – Combine

Built: 1912

Retired: 1955

Arrived: 1956

Donated by: CNR

This is a fine example of the classic wooden suburban ("rad a") car that was built in 1912 to run between Montreal and towns across the St. Lawrence River. Most of its life was spent in this suburban service and the baggage section was used as a compartment for smokers. Special interurban features include the baggage section, Pullman roof, stained glass upper sash, wider seat spacing and multiple-unit control, which permits more than one motorcar to be controlled by a single motorman as in subway trains. The rear "drop vestibule" and the truck mounting of the pilots are unusual. The trucks are a Curtis design used in quantity, so far as is known, only by the M&SC, the Illinois Traction System and the Toronto & York Radial Railway.

Suburban cars are generally smaller than interurbans and not designed to be mixed with freight equipment. A notable difference is that suburban cars are generally not equipped with cavatories. The trucks were rebuilt and regauged by National Steel Car.

**North
Railway
(1924)**

Built by:

Desc:

Built:

Retired:

Arrived:

**Purchased
in 1972:**



Al Chione

North Yonge Railways – TTC 416 (1924)

Built by: Ottawa Car
Manufacturing Limited

Desc.: DT DE Arch Roof

Built: 1925

Retired: 1948

Arrived: 1973

**Purchased from Mr. Fred Spratt
in 1973**

Car 416 was built by Ottawa Car Co. for the former Hydro Electric Power Commission, which operated several railways on behalf of the municipalities that owned them. Twenty 400s were built, eight for the Port Credit radial and 12 for Windsor (SW&A). They were typical lightweight city/suburban cars, a type very common in the U.S.A., but not widely used in Canada. The roof-mounted headlights were a Hydro characteristic.

In 1930 all eight cars were transferred to the North Yonge Railways and ran to Richmond Hill until the line was abandoned in 1948. The body of 416 then became a residence in Hillsborough, Ontario until 1972. It was the first car to be restored to operating condition after acquisition as a "dead body". Museum forces did all the work. The Taylor low-floor trucks came from Boston as the type was extinct in this country. It is currently sitting on CC&F trucks pending rehabilitation of the Taylors.



London & Port Stanley 8 (1915)

Built by: Jewett Car Company
(Newark, Ohio)

Desc.: DT DE ML Arch Roof
Combine

Built: 1915

Retired: 1963

Arrived: 1971

**Purchased from the
Government of Ontario**

During the years prior to World War One, Ontario Hydro planned a number of high-speed electric railways linking the principal cities to southern Ontario. In 1915 the L&PS was electrified to standards planned for the network, as a demonstration of what was to come. For various reasons the main lines were never built, but the L&PS remained as a monument to Hydro foresight.

This car is one of five built for the opening of the line. The car bodies were built by the Jewett Car Manufacturing Co. in Newark, Ohio, but much detail work and electrical installation was performed by the Preston Car & Coach Co. It was designed before the development of techniques that combined structural strength with moderate weight. As a result, it is brutally heavy (over 46 tons) and few heavy-steel interurbans have survived in Canadian museums owing to their high value as scrap metal.

Car 8 was completely gutted by fire on January 4, 1926, which was caused by a short circuit. It was rebuilt by Canadian Car & Foundry in Montreal and carried passengers in London until 1957. After the end of passenger service, 8 saw use as a switcher until 1963. The car was purchased from the Province of Ontario in 1968 and arrived at the museum in 1971. The trucks were regauged by National Steel Car without charge to the museum.



Lake Erie Northern 1915

Built by: Jewett Car Company
(Newark, Ohio)

Desc.: DT DE ML Arch Roof
Combine

Built: 1915

Retired: 1963

Arrived: 1971



Lake Erie & Northern 797 (1915)

Built by: Preston Car &
Coach Company

Desc.: DT DE MU Heavyweight
Interurban Combine

Built: 1915

Retired: 1955

Arrived: 1999

Built by Preston Car & Coach Company of Preston, (now Cambridge), Ontario in 1915, this car is significant for a number of reasons. It's the only surviving Canadian Pacific Electric Lines passenger car and is believed to be the only Preston interurban motor car in existence.

The LE&N, and a few years later, the Grand River Railway, operated at 1500 volts, direct current, which was considered at the time to be superior for use on interurban railways. Passenger cars of both lines used the Westinghouse AB, multiple unit control system, which featured automatic acceleration.

Built to CPR steam coach standards, car 797 provided baggage, express and passenger service from 1916 until the end of regular passenger operations in 1955. Fortunately, American interests saved the car from the scrapper's torch, and moved to New York. The car was acquired by the Seashore Trolley Museum in Maine where it remained in storage for more than 20 years. In 1999, a deal was reached with Seashore to trade the car for TTC Witt 2890. After 44 years in the U.S.A. the car returned home to Canada.

Collection Roster

Fleet No.	System	Builder	B.T.	RET.	ACQ.	Type	Comments
23	LSR	MP&I	1901	1935	1984	SE-DT Streetcar	Acquired as a body. Restored to running condition
55	TCR	Preston	1915	1954	1984	DE-DT Streetcar	Body only. Used as a cottage
82	OR	Ottawa	1923	1940	1984	DE-DT Streetcar	Body only. Used as a cottage
212	SV&A	Preston	1922	1940	1984	SE-DT Streetcar	Body only. Used as a cottage
327	TTC	TTC	1933	1967	1968	SE-ST Streetcar	Components salvaged from original open cars burned out at King
5	HSP	NSC	1927	195	1984	SE-DT Streetcar	Body only. Used as a cottage
1326	TRC	TRC	1910	1951	1984	SE-DT Streetcar	First car acquired in 1954. Used for special events only
704	TRC	TRC	1913	195	1984	SE-ST Streetcar	Used as a rail grinder (W-25, from 1925 unit 1962)
2395	TTC	CC&F	1921	1938	1984	SE-DT Trailer	Body only. Used as a cottage. Only surviving 2-door trailer
2424	TTC	CC&F	1921	196	1984	SE-DT Streetcar	From the TTC's first order for new cars in 1921
2786	TTC	CC&F	1922	1963	1984	SE-DT Streetcar	Operated occasionally for special events. Small Peter Witt type.
2894	TTC	Ottawa	1923	196	1984	SE-DT Streetcar	Body only. Used as a cottage
2984	TTC	CC&F	1923	1954	1984	SE-DT Streetcar	Large Witt car. Body only. Used as a cottage. 2-man operation.
4000	TTC	CC&F	1938	1968	1984	SE-DT Streetcar	Toronto's first All-Electric PCC. Train no. 4000
4386	TTC	CC&F	1947	1990	1990	SE-DT Streetcar	Class A-6 type A. Electric PCC car. Rebuilt in 1972-75
4426	TTC	CC&F	1949	1982	1984	SE-DT Streetcar	Class A-7 type A. Electric PCC car
4600	TTC	CC&F	1951	1995	1996	SE-DT Streetcar	Prototype A-15 rebuilt in 1986 from Class A-8 car 4505
4611	TTC	CC&F	1951	1995	1996	SE-DT Streetcar	Class A-15 rebuilt in 1986 from Class A-8 car 4505
4618	TTC	CC&F	1951	1995	1996	SE-DT Streetcar	Class A-15 rebuilt All-Electric PCC. Formerly Class A-8 car 4501
4684	TTC	St. Louis	1946	1996	1996	SE-DT Streetcar	Class A-12 PCC. Formerly Cleveland 4233, one of a pair
3	L&PS	Preston	1915	1955	1973	DE-DT Trailer	Interurban trailer. Body only
8	L&PS	Jewett	1915	1961	1973	DE-DT Interurban	1500V. High speed MU interurban. Regauged by NSC
107	M&SC	Ottawa	1912	1955	1956	DE-DT Suburban	Multiple unit Suburban Combine. First interurban car
416	TTC	Ottawa	1925	1948	1984	SE-DT Streetcar	Former Toronto & York Radial Railway 416. Used as a cottage
797	LE&N	Preston	1915	1955	1999	DE-DT Interurban	Multiple unit Interurban Combine. Unique 2/3 baggage
48	CTA	St. Louis	196	1996	1996	DE-DT Rapid Transit	Multiple unit. First CTA car
5098-5099	TTC	GRW&C	1953	1990	1991	SE-DT Rapid Transit	Married pair. First cars in inaugural train
5300-5301	TTC	MLW	1961	1999	1999	SE-DT Rapid Transit	Married pair. First Subway cars built in Canada
45	OR	NS&T	1925	1965	1965	SE-DT Line Car	Overhead maintenance car
C-1	TRC	TTC	1911	1968	1984	SE-DT Crane	Crane car. Equipped with 5-ton crane. Brown
M-4	LE&N	ERICO	1915	1962	1962	SE-ST Rail Bender	Self propelled welding car. Only surviving ERICO Bender
RT-7	TTC	Preston	1915	1970	1984	DE-ST Grinder	Subway rail grinder. Converted from open car
RT-28, RT-29	TTC	Ecolaire	1987	2001	2001	DE-DT Flatcar	Trucks & components from retired Gloucester subway cars
5-37	TTC	Russel	1920	1973	1973	DE-DT Interurban	Interurban truck. Equipped with 5-ton crane
TP-11	TTC	NSC	1945	1976	1973	DE-DT Snow Plow	Snow plow. Equipped with high speed interurban trucks
W-4	TRC	TRC	1904	1974	1974	DE-DT Flat Motor	Flat motor. Equipped with cable

Fleet No.	System	Builder	BLT.	RET.	ACQ.	Type	Comments
2214	CTC	Preston	1917	1975	1975	SE-ST Rail Grinder	Rail grinder. Converted from snow scraper 2214.
4206 & 4243	CTC	Pullman	1917	1975	1975	SE-ST Rail Grinder	Rail grinding train. PCC cars 4631 and 4668, CTS 4206 & 4243.
335	LE&N	BW	1916	1973	1973	DE-DT Locomotive	Formerly Cornwall #16, originally Lake Erie & Northern #50
1000HP	CTC	Le	1916	1973	1973	DE-DT Locomotive	Boxcab locomotive 1000Hp, 1500 VDC
M 5	CWH	Westing	1915	1967	1968	DE-ST Trackmobile	Model TM trackmobile. Originally Westinghouse #11845.
TM 2	CPR	Westing	1915	1967	1967	DE-ST Trackmobile	Model 2 TM trackmobile. Regauged by HCRP
9482	CNR	Pullman	1945	1995	1996	Baggage-Dorm	Formerly CN sleeper 2053 - "Val Brillante", originally New York Central 10423 - "Dorcas Bay"
42108	CPR	AC&F	1915	1975	1975	Auto Boxcar	Wood sheathed auto boxcar. Used for parts storage
42108	CPR	AC&F	1922	1975	1975	Auto Boxcar	Wood sheathed auto boxcar. Used for parts storage.
80903	CPR	NSC	1906	2006	2006	Boxcar	Newsprint boxcar - used for parts storage
80903	CPR	NSC	1906	2006	2006	Boxcar	Newsprint boxcar - used for parts storage
160081	CPR	NSC	1906	2006	2006	Boxcar	Insulated/heated boxcar - used for storage
160081	CPR	NSC	1906	2006	2006	Boxcar	Insulated/heated boxcar - used for storage
434145	CPR	CP	1953	1991	1991	Hopper Car	Ballast hopper - used for ballasting track. Regauged by NSC
434145	CPR	CP	1953	1991	1991	Caboose	Steel caboose. Still standard gauge.
434145	CPR	CP	1953	1991	1991	Caboose	Steel caboose. Still standard gauge.
2	TTC	Ford	1970	1970	1975	Dumptruck	5t dumptruck equipped with flanged wheels.
189-63	CNR	Fairmont	1970	1999	2002	Self-Propelled	Self-Propelled track inspection car
2204 16	TH&B	Janron	1973	1999	1999	Gang Car	Self-Propelled Model A-4 Gang car.
2210-20	CPR	Nordberg	1973	1990	1990	Tamper	Diesel hydraulic switch tamper. Regauged by HCRP
2211 19	CPR	Janron	1973	1990	1990	Liner	Self-Propelled track liner. Converted to tie changer
2211 19	CPR	Janron	1973	1990	1990	Regulator	Diesel hydraulic Ballast Regulator. Regauged by HCRP
B	TTC	TTC	1923	1970	1970	Tower Cart	Wooden overhead maintenance tower built on flatcar.
RT-24, RT-25	TTC	TTC	1981-83	2002	2002	Line Truck	2t trucks equipped with flanged wheels. Formerly a Pepsi truck
RT-24, RT-25	TTC	TTC	1981-83	2002	2002	Snow Blower	Gasoline snow blower mounted on de-motored subway car truck.
TH&B	TH&B	Fairmont	1970	1999	1999	Speeder	Self-Propelled track inspection car
W-3	CNR	Sylvester	1944	1965	1965	Hand Car	Hand powered track inspection car
23	TTC	TTC	1970	1970	1970	Trolley Coach	Prototype trolley coach used on Mt. Pleasant Rd. One of four built.
34	HSR	Ford	1976	1976	1976	Line Truck	Equipped with tower for overhead wire maintenance
43	AB	Ford	1976	1976	1976	Dumptruck	Ford F-350 dumptruck
141	TTC	Ford	1986	2005	2005	Line Truck	Overhead line truck. Equipped with Hi-rail equipment
400	HSR	GM	1986	1986	1986	Forklift	2ton Forklift. Equipped with Propane Engine
517	HSR	GM	1986	1986	1986	Bus	GM Model TDH-4512. Formerly Brampton Transit #5741.
32	HSR	Bell	1986	1986	1986	Trolley Coach	Bn. Model T-48
765	HSR	Flyer	1972	1994	1994	Trolley Coach	Flyer E 700.
92	TTC	Ford	1970	1995	1995	Bus	Former Kitchener Transit #20. Rebuilt by Centennial Coach
7801	HSR	Flyer	1978	1994	1994	Trolley Coach	Flyer E 800. Modified by GEC Alsthom for dual power
800	HSR	Flyer	1978	1994	1994	Trolley Coach	Flyer E 800. Modified by GEC Alsthom for dual power
8058	TTC	GM	1976	2005	2005	Bus	GM Model T6H-530/N. Equipped with Detroit 6V71 Engine.
2348	TTC	Ford	1970	1970	1970	Trolley Coach	Flyer E-700. New body. Components from TTC Brl coaches

Rapid Transit



Toronto TTC 5098-5099 (1954)

Built by: Gloucester Railway Carriage & Wagon Co.

Desc.: DT SE G-1 Class
Subway Cars

Built: 1953

Retired: 1990

Arrived: 1991

Donated by: TTC

These cars are representative of the rolling stock purchased for the opening of Canada's first subway, which was the Yonge route from Union Station to Eglinton on March 30, 1954. Built by Gloucester Railway Carriage & Wagon Co. of Britain, they came in "married pairs"; the operating configurations were in multiples of two cars. The cars could not be run singly because the pairs shared some of the auxiliary equipment; the even and odd numbered cars differed from each other.

One hundred of these cars (5000-5099) were initially ordered, plus four similar aluminum-bodied cars, later increased to six (5100-5105). All of these cars originally operated in six car trains. Later, the purchase of 28 matching non-driving motor cars (5200-5227) for mid-train use and six cars with experimental equipment ("Sputniks" 5110-5115) enabled the increase of train lengths to eight of these 57 cars, which still fit the standard 500' subway station platforms.

The cars saw more than 30 years of intensive use and were seriously considered for resale for further operation when they were retired in 1990.

Toronto
5300-5
(1962)

Built by:

Desc.: DT

Built: 1962

Retired:

Arrived:

Donated



Photo: Jones

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Glen Franks

Toronto TTC 5300-5301 (1962)

Built by: Montreal
Locomotive Works

Desc.: DT SE M-1 Class
Subway Cars

Built: 1962

Retired: 1999

Arrived: 2001

Donated by: TTC

Built in 1962 by the Montreal Locomotive Works, these cars were the first subway cars built in Canada. At the time of their construction they were the longest subway cars in the world at just over 75' in length. They also featured cutting-edge traction equipment developed by General Electric. The cars were purchased to coincide with the opening of the University Subway in 1963 and operated in daily service until they were finally retired in 1999. The cars' design was the basis for all subsequent orders of the TTC Subway cars.

The cars have been used extensively for movie work since arriving at the museum.



Glen Franks

Chicago Transit Authority 48 (1961)

Built by: St. Louis Car Company

Desc.: DT DE All Electric PCC
Rapid Transit

Built: 1961

Retired: 1998

Arrived: 1999

Purchased from CTA

Built in 1961 by the St. Louis Car Company, this car is typical of the original rapid transit equipment specified for the Toronto Subway system. Economic subsidies for British equipment made the Gloucester built cars more economical for the TTC and the PCC type cars were never purchased.

The car is an example of what might have been for the Toronto Subway, and exemplifies the continued development of the PCC design beyond streetcars. Many of the fundamental design elements of the early air-electric PCCs are still apparent and the traction system and equipment layout remained largely unchanged throughout PCC production. Unlike the majority of Chicago's rapid transit fleet, the 550 series were equipped with third rail shoes and trolley poles to enable them to operate both on the "L" and suburban rapid transit lines. The car was completely rebuilt by Morrison Knudsen in 1985.

Freight Locomotives



Ian Smith

Lake Erie & Northern 335 (1915)

Built by: Baldwin Locomotive Works and Westinghouse

Desc.: DT DE Steeple Cab Locomotive

Built: 1915

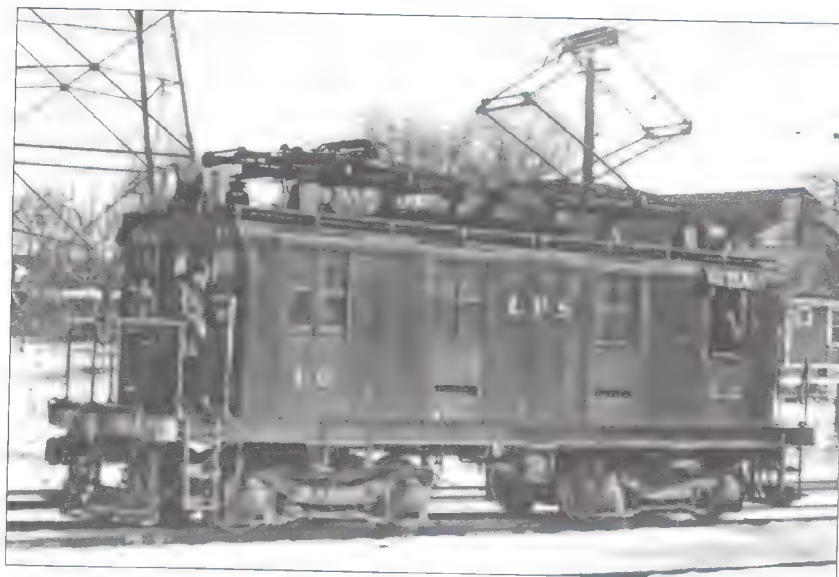
Retired: 1971

Arrived: 1973

Purchased from: CNR

In later years, many interurban lines (and a few street railways) made most of their revenues from freight. Almost invariably the motive power used was a standard line of motors built by Baldwin Locomotive Works and Westinghouse. Very powerful for their size and capable of multiple-unit operation, they could handle loads equal to those of much larger steam and diesel locomotives.

Locomotive 335 was built in 1915 for the opening of the Lake Erie & Northern Railway. It ran there until diesels replaced the electrics in 1961 and was sold to the Cornwall Street Railway Light & Power Co. as locomotive 16. The Cornwall operation was bought out and dieselized by Canadian National in 1971. This motor was purchased from CN in 1973. Its trucks are a special Baldwin MCB design adapted from those used on steam locomotive tenders.



London & Port Stanley L-2 (1915)

Built by: General Electric

Desc.: DT DE MU Electric Box Cab Locomotive

Built: 1915

Retired: 1965

Arrived: 1997

L-2 is one of three box cab locomotives (L-1 to L-3), built for the opening of the L&PS by General Electric in 1915. L-2 is a standard design, 60 ton, 1500-volt electric locomotive. Similar units were produced for the Piedmont & Northern, the Fort Dodge, Des Moines and Southern, as well as properties in South America.

L-2 was used primarily in road freight and switching service. Capable of multiple unit operation, these locomotives were also equipped for passenger service and occasionally saw service pulling trains of passenger coaches and trailers to the beach at Port Stanley.

Electric switching roads and interurban lines generally preferred the superior visibility provided by steeple cab locomotives. The box cab configuration was rare in Canada. In continuous service from 1915 to 1965, L-2 is one of two known interurban box cabs preserved in Canada. Sister L-1 is on display at the Elgin County Railway Museum in St. Thomas, Ontario.

Elect



Toronto TFC (1904)

Built by: Toronto

Desc.: DT SE Fiat

Built: 1904

Retired: 1973

Arrived: 1973

Purchased from
TTC in 1973

Electric Work Equipment



Toronto TRC TTC 4 (1904)

Built by: Toronto Railway Co.

Desc.: DT SE Flat Motor

Built: 1904

Retired: 1973

Arrived: 1973

Purchased from the
TTC in 1973

This is typical of flat utility motors found on nearly every street railway. This work motor car (W-4 after 1921) was built by the Toronto Railway Co. at Front and Frederick in 1904 and has been restored to its original appearance at the museum. The fender is a Watson (replica) and the trucks are Curtis D-2, which was the truck usually used by the Toronto Railway Co. and also found on car 1326. The trucks were built in Toronto by the Canada Foundry Co. This car was purchased from the TTC in 1973.



Toronto TRC TTC C-1 (1911)

Built by: Toronto Railway Co.

Desc.: DT SE Crane

Built: 1911

Retired: 1968

Arrived: 1968

Purchased from the TTC
in 1967

Seldom seen by the casual observer were Toronto's two crane cars, since they were usually used at night carrying track work components to job sites. C-1 was built in 1911 by the Toronto Railway Co. and has been several times rebuilt, notably about 1948 when the deck was renewed. The electric hoist has a 5-ton capacity and can swing right around. The trucks are specially strengthened Baldwins. This car was purchased from the TTC in 1967 and rehabilitated by museum personnel at Hillcrest Shops before shipment. In spite of its rugged construction this car was as quiet and smooth running as a passenger car.

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Desc

Built:

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Purchas

in 1973



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Ian Smith

Toronto TTC S-37 (1920)

Built by: Russell Car &
Snow Plow Co.

Desc.: DT DE Snow Sweeper

Built: 1920

Retired: 1973

Arrived: 1973

**Purchased from the TTC
in 1973**

Snow sweepers were Toronto's most numerous class of work cars, the first of them dating back to horse-car days. S-37 was built in 1920 for the Eastern Massachusetts Street Railway in Boston, by the Russell Car & Snow Plow Co. In 1947 the TTC replaced most of its single-truck sweepers with 12 large cars from the Third Avenue Railway System of New York. As one of these purchased cars, car 90 became car S 37. The trucks are Brill 27 E 1 type, a common interurban truck. Purchased from the TTC in 1973, S-37 underwent major frame and carbody restoration in 2004.

Snow sweepers were a common sight on city streets during snow storms. The brooms were very effective at keeping the tracks clean. However, the increased use of salt and improved municipal plowing rendered sweeping obsolete by the late 1960's.



Glen Franks

Toronto TTC TP-11 (1946)

Built by: National Steel Car Corp.
& TTC Hillcrest shops
Desc.: DT SE Snow Plow
Built: 1946
Donated by: TTC

When the "Big Snow" of December 1944 revealed the inadequacies of its snow-clearing equipment, the TTC ordered two powerful track plows capable of coping with any conceivable snowfall. The bodies were built by the National Steel Car Corporation and prepared for service at Hillcrest Shops. These are among the largest snow-fighting vehicles ever built for urban service and were used until increasing use of road salt made them unnecessary. The trucks are light Baldwins originating on the ex-Civic Railways Niles cars. The car was donated by the TTC in 1978. This was the last piece of street railway equipment built by National Steel Car.



Oshawa (1925)

Built by: NS
Desc.: DT SE
Built: 1925
Retired: 19
Arrived: 19
Donated by:



ian Smith

Oshawa Railway 45 (1925)

Built by: NS&T Railway

Desc.: DT SE Line Car

Built: 1925

Retired: 1964

Arrived: 1964

Donated by: CNR

Overhead line cars on many railways were adapted from older cars, and often had a makeshift appearance. Far otherwise is car 45, which was built at St. Catharines by the NS&T Railway for the Oshawa Railway in 1925. The tower originally could be raised to reach the wire, but this is unnecessary here as our overhead is lower than Oshawa's though much of it was built with components and wire that came from there. The body contains a small workshop in which emergency repairs could be made on the spot. The trucks are heavy Baldwins that are believed to have originated on the London & Lake Erie Railway, since four of those cars came second-hand to Oshawa in 1919.

Car 45 was donated by Canadian National in 1964 and regauged by National Steel Car Corp. Its motors were rebuilt by Canadian Westinghouse, both without charge to the museum.



ian Smith

Lake Erie & Northern M-4 (1915)

Built by: Electric Railway Improvement Co.

Desc.: DE ST Rail Bonder **Retired:** 1961

Built: 1915 **Arrived:** 1962

Donated by: Canadian Pacific Electric Lines

This small car was a standard item produced for many interurban lines by the Electric Railway Improvement Co. in Cleveland. It is a self propelled unit with chain drive to one axle governed by a primitive all-or-nothing clutch.

Its purpose is to test and, when necessary, repair the flexible bonds at rail joints. The Bonder operated on both the Lake Erie & Northern and the Grand River Railway. It was rebuilt with enclosed cab in about 1952 and donated by Canadian Pacific Electric Lines in 1962. M-4 was converted from 1500 volt to 600 volt direct current operation by Association forces in 1994.



Tom Twigg-Molecey

Toronto TTC RT-28 & RT-29 (1988)

Built by: Ecolaire

Desc.: DT DE Subway Flat Motors **Retired:** 2001

Built: 1988 **Arrived:** 2001

These cars were built in 1988 by Ecolaire in St. Thomas, Ontario using traction components and trucks from retired Gloucester Subway cars. RT 28 and 29 were frequently used for material delivery and maintenance work in the subway. These flatcars are bi-directional and equipped with an operators cab at each end. They were retired in 2001 when they were replaced by larger and more modern cars.



Northern M-4

Built by: Preston Car & Coach Co.
 Retired: 1961
 Arrived: 1962
 Desc.: SE Rail Grinder
 Built: 1915
 Donated by: TTC
 Like RT-7, began life as Civic Railways car 53. Like car 55, it was rendered obsolete by the TTC with the introduction of the Peter Witts. The car was renumbered 2206 and converted into a snow scraper. It was subsequently converted into rail grinding car W 27. The purpose of a rail grinder is to smooth out irregularities in the surface of the rails resulting from normal wear and tear. Abrasive blocks between the wheels were pressed on to the rails by compressed air. The car was subsequently modified for subway service and along with RT-5, it ground the rails in the subway system until both cars were replaced by converted PCC Rail Grinders in 1970.



Toronto TTC RT-7 (1915)

Built by: Preston Car & Coach Co.
 Desc.: ST SE Rail Grinder
 Retired: 1976
 Built: 1915
 Arrived: 1976
 Donated by: TTC

TTC RT-7 began life as Civic Railways car 53. Like car 55, it was rendered obsolete by the TTC with the introduction of the Peter Witts. The car was renumbered 2206 and converted into a snow scraper. It was subsequently converted into rail grinding car W 27. The purpose of a rail grinder is to smooth out irregularities in the surface of the rails resulting from normal wear and tear. Abrasive blocks between the wheels were pressed on to the rails by compressed air. The car was subsequently modified for subway service and along with RT-5, it ground the rails in the subway system until both cars were replaced by converted PCC Rail Grinders in 1970.

W-28 & RT-29 (1988)

Built by: Preston Car & Coach Co.
 Retired: 2001
 Arrived: 2001
 Desc.: SE Rail Grinder
 Built: 1917
 Donated by: TTC
 Like RT-7, began life as Civic Railways car 57. Upon being withdrawn from passenger service it became snow scraper 2214. It was later converted into a rail grinding car and along with W-27 took care of Toronto's streetcar track surface maintenance. The car had a significant overhaul in 1970, which fundamentally changed its appearance. It remained in grinding service until it was replaced by PCC rail grinders W-30 and W-31 in 1976.



Dave Barrett

Toronto TTC W-28 (1917)

Built by: Preston Car & Coach Co.
 Desc.: ST SE Rail Grinder
 Retired: 1976
 Built: 1917
 Arrived: 1976
 Donated by: TTC

Like RT-7, car W-28 was built as a Toronto Civic Railway passenger car (car 57). Upon being withdrawn from passenger service it became snow scraper 2214. It was later converted into a rail grinding car and along with W-27 took care of Toronto's streetcar track surface maintenance. The car had a significant overhaul in 1970, which fundamentally changed its appearance. It remained in grinding service until it was replaced by PCC rail grinders W-30 and W-31 in 1976.



Emily Thompson

Toronto TTC W-30 & W-31 (1946)

Built by: Pullman Standard

Desc.: DT SE PCC
Rail Grinding Train

Built: 1946

Retired: 2002

Arrived: 2002

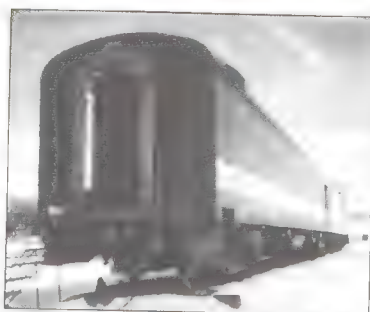
Donated by: TTC

Formerly TTC surface cars 4631 and 4668, these cars were purchased second-hand from the Cleveland Transit System in 1952. They were originally numbered 4206 and 4241. Built by Pullman in 1946, they were equipped for multiple unit operation, but were not equipped with couplers.

Once purchased by the TTC, the cars were extensively modified to meet TTC standards and couplers were added. They operated in trains on the Bloor-Danforth route from 1953 until 1966 and on Queen from 1967 until 1974. The cars were converted to rail grinders by the TTC at Hillcrest Shops in 1974-75 and replaced rail grinder W-28, which is also in the museum collection. W-31 was raised by four inches and operates on custom built grinding trucks, which were home built by the TTC. W-30 was used to provide extra power for the high-speed grinding operation. The cars last grinding service was in 1997. They were later retired in 2002.



Freight/Passenger Equipment



VIA Rail 9482 (1948)

Built by: Pullman Standard **Retired:** 1995
Built: 1948 **Arrived:** 1996

This car is a fourteen roomette sleeping car with baggage section. It was formerly CN 22 roomette sleeper 2053 called the "Val Brillante". It was originally New York Central sleeper 10423 called the "Dorcas Bay". The car is currently used for accommodation for the Association's volunteers.



Canadian Pacific Railway 40937 & 42108 (1923, 1922)

Built by: American Car & Foundry
Built: 1923, 1922 **Arrived:** 1975
Retired: 1975 **Donated by:** CPR

These boxcars are typical of electric/steam era freight equipment. They were used to transport automobiles and later general freight. They were acquired in 1975 for parts storage at the museum.



Canadian Pacific Railway 80586 & 80903 (1965)

Built by: Hawker Siddeley (Trentonworks)
Built: 1965 **Arrived:** 2006
Retired: 2006 **Donated by:** CPR

These standard 50' plug door boxcars were built for newsprint service, in which they remained until retirement. They are used for parts storage at the museum.



Tom Twigg-Molecey

Canadian Pacific Railway 360724 (1953)

Built by: National Steel Car

Built: 1953

Retired: 2005

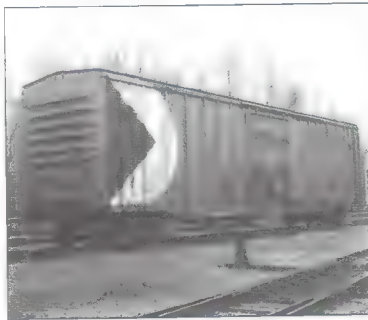
Arrived: 2006

Donated by: CPR

A derivative of the standard hopper car, this car was modified as a ballast hopper. It is specifically designed for distributing ballast on track. It has been regauged to run at the museum and is used for track maintenance.



Glen Franks



Tom Twigg-Molecey

Canadian Pacific Railway 166031, 166081 (1966)

Built by: National Steel Car

Built: 1966

Retired: 2006

Arrived: 2006

Donated by: CPR

These Insulated/Heated boxcars were used to transport perishable freight, such as bagged cement. They were converted into a permanent archives storage facility for the museum's many artefacts, including uniforms, blueprints, maps, photographs and negatives, as well as many other railway related items.



way

Arrived: 2006
Donated by: CPR

When this car
was first built,
it was used to
carry mail and
passengers.

way

Arrived: 2006
Donated by: CPR

When this car
was first built,
it was used to
carry mail and
passengers.



Gen Franks

Canadian Pacific Railway 434145 (1950)

Built by: Canadian Pacific Railway – Angus Shops
Built: 1950
Retired: 1990
Arrived: 1991
Donated by: CPR

Caboose 434145 was built in 1950. It was an important visual part of Canadian Railways for more than 100 years. Early in 1990 changes were made in many companies that would result in the removal of the caboose from most main line trains. The caboose, or "van" as it was also called, provided a home away from home for train crews. Bunk beds, stove, fridge, sink, table and toilet guaranteed the basics on long trips. CP 434145 retired in 1990 and arrived at the museum in 1991 as a donation from the CPR.



Chris Smith

London & Port Stanley C-2 (2nd) (1926)

Built by: Pere Marquette Railroad
Built: 1926
Retired: 1965
Arrived: 1975

An earlier and much more spartan caboose than 434145, C-2 was typical for its era. Lightweight, and generally lacking in comfort, it was used in electric freight operations until full dieselization of the L&PS in 1963.

Miscellaneous Work Equipment

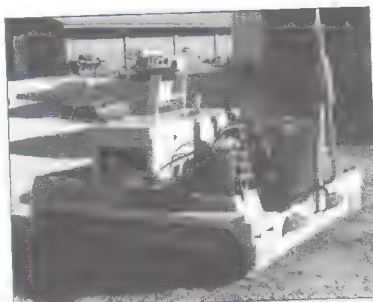


CWH M-5 (1952)

Built by: Whiting
Built: 1952

Retired: 1967
Arrived: April 1967

Trackmobile M-5 was purchased from Canadian Westinghouse in Hamilton. A trackmobile is a form of small internal combustion locomotive intended for switching in confined spaces. It has rubber-tired wheels, while its flanged wheels run on the rails to perform the switching required. M-5 is a model TM and is one of the few original trackmobiles preserved. While lightweight, trackmobiles gain traction effort by lifting the end of the railcar they are towing and transferring the weight to the drive axle.



Whiting TM-2 (1956)

Built by: Whiting
Built: 1956
Donated by: Whiting

Arrived: 1999
Retired: 1997

Like M-5, TM-2 was manufactured by Whiting Equipment. Originally purchased by the Canadian Pacific Railway, it was traded in to the Whiting factory in Weiland and was used as a shop switcher there for many years. During its time at CPR the road wheels were removed. Whiting donated the model TM-2 machine in 1999. It has been regauged and rebuilt.



Hamilton Street Railway 34 (1940)

Built by: Ford Motor Co.
Built: 1940

Retired: 1976
Arrived: 1976

This Hamilton Street Railway overhead line truck is a 1940 Ford two ton. It was used regularly for overhead wire maintenance until its retirement.



Retired: 1967
Arrived: 1967

This is a Canadian
overhead maintenance
truck. It is a modified
Ford motor truck with
a platform on the back
that can be raised
up to 35 feet. It is
used for overhead
line repairs.

Arrived: 1999
Retired: 1997

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a platform on the back
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line repairs.

Way 34 (1940)

Retired: 1966
Arrived: 1966

This is a truck
used for
maintenance.



Tom Twigge-Molecey

Toronto TTC 143 (1986)

Built by: Ford Motor Co.
Built: 1986
Retired: 2005
Arrived: 2005
Donated by: TTC

This is the modern replacement for vehicles such as Oshawa Railway 45. This overhead maintenance truck can go virtually anywhere. The tower can be elevated up to 35' above the ground and the platform can rotate to both sides of the truck. It is equipped with rail equipment and can be operated on railway track. It was donated by the TTC in 2005.



Lake Erie & Northern M-6 (1934)

Built by: Ford
Desc.: SE ST Line Truck
Built: 1934
Retired: 1961
Arrived: 1963
Donated by: Canadian Pacific Electric Lines

Believed to have begun life as a Pepsi-Cola truck in 1934, this car was adapted for rail use by the Lake Erie & Northern in 1945 with a new body and collapsible ladder on the roof. A new V 8 engine was also installed at about that time and the car used for overhead line repairs. By means of a jack centrally mounted underneath it may be raised off the rails and turned around at any point.

Donated by Canadian Pacific Electric Lines, it was regauged by the Association and was the first vehicle to move under its own power (gasoline powered) on the museum railway on May 4, 1963.

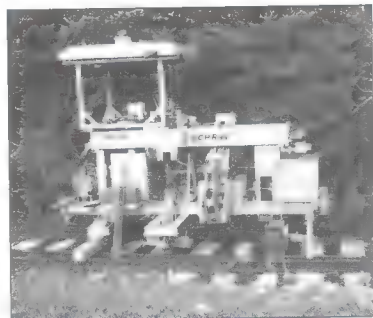


Toronto Hamilton & Buffalo 2204-16 (1970)

Built by: Canron
Built: 1970
Retired: 1989

Arrived: 1990
Donated by: CPR

The hydraulic tamper marked the future of track maintenance when it was introduced in the 1940's. The machine is used to lift the track into line and pack the ballast around the ties. This is a process known as tamping. Tampers are an essential piece of track maintenance equipment.



Tony Smith

Canadian Pacific Railway 2210-20 (1973)

Built by: Nordberg
Built: 1973
Retired: 1989

Arrived: 1990
Donated by: CPR

Built as a hydraulic track liner, this machine was used to correct horizontal alignment deviations in railway track. The unit was completely rebuilt and regauged by the Association. It was converted into a hydraulic tie changer, which is used to replace rotten track ties. It is also equipped with hydraulic fittings for using hand-held hydraulic track tools.



Ian Smith

Canadian Pacific Railway 2211-19 (1972)

Built by: Canron
Built: 1972
Retired: 1989

Arrived: 1990
Donated by: CPR

While it resembles a snow plow, this machine is a ballast regulator. Its primary function is to evenly distribute granular ballast along railway track using its front plow and side wings. For final cleanup of any stray ballast, it is equipped with a hydraulic broom, which actually sweeps the track clean.

Tro



Buffalo

Arrived: 1990
Donated by: CPR

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Arrived: 1990
Donated by: CPR

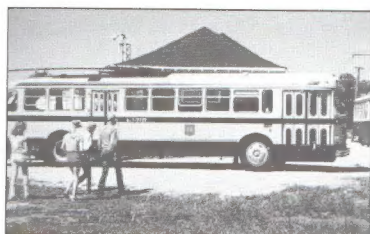
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Arrived: 1990
Donated by: CPR

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Trolley Coaches



Hamilton Street Railway 732 (1950)

Built by: Brill/Canadian Car & Foundry
Built: 1950 Retired: 1978
Purchased from Arrived: 1981
Hamilton Street Railway

This is the standard Can-Car trolley coach built in great numbers between 1946 and 1952 and used from coast-to-coast in Canada. They were built by designers whose experience was in railways rather than the automotive industry. The body is more solidly built than normal for rubber-tired vehicles. It was purchased from the Hamilton Street Railway and arrived at the museum in 1981.



Tom Twigg-Molecey

Hamilton Street Railway 765 (1972)

Built by: Western Flyer
Built: 1972 Arrived: 1995
Retired: 1995 Donated by: HSR

After the TTC's successful trolley coach rebuild program, where new bodies were equipped with traction components from older coaches, the Flyer went on to produce this standard model E-700 coach using all new components.



Bill Miller

Hamilton Street Railway 7801 (1978)

Built by: Western Flyer/GEC Alstom
Built: 1978 Arrived: 1995
Retired: 1995 Donated by: HSR

An update of Flyer's E-700 model, the E-800's featured an updated body, but the same traction system. The coaches were modified in 1990 to include a diesel generator and electronic chopper control system to enable them to be operated without overhead power for short distances.

Motor Buses



Jim Hunt

Toronto TTC 792 (1946)

Built by: Ford Transit

Built: 1946

Retired: 1968

Donated by:

Arrived: 1968

Kitchener Public Utilities Commission

This Ford bus was built in 1946 and purchased from the Kitchener Public Utilities Commission in 1968. This bus is an excellent example of a small urban bus used on secondary routes everywhere. Approximately 18,000 were built, many in Union City, Indiana.

The number is fictitious. It was actually car 20 in Kitchener, but was painted in orthodox pre-war Toronto bus colours by the TTC for an exhibit at the 1984 CNE. Similar Ford buses in Toronto were numbered up to 791. Prior to 1951, it was owned by the Blue Bird Coach Lines in Woodstock, Ontario.



Tom Twigge-Molecey

Hamilton Street Railway 517 (1956)

Built by: General Motors

Retired: 1984

Desc.: Model TDH-4512

Arrived: 1986

Donated by: Brampton Transit

This is the standard GM transit bus from the 1950's. It is an old look model TDH-4512 and was built for the Hamilton Street Railway as car 517. It was subsequently sold to Brampton Transit where it operated as car 5741. The bus has been repainted back into its Hamilton livery.



John French

Toronto TTC 8058 (1976)

Built by: General Motors

Built: 1976

Desc.: Model TGH-5307N

Retired: 2004

Arrived: 2004

Donated by: TTC

This 'new-look' bus is typical of tens of thousands of GM Buses which operated across North America. It was the last "un-rebuilt" new look to operate in Toronto.



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rived: 1968

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Acknowledgements

Thank you to our major supporters over the past 50 years.

Toronto Transit Commission

Canadian Pacific Railway

Canadian National Railway

Hamilton Street Railway

Ainsworth Inc.

Battlefield Equipment Rentals

Bombardier Transportation

C.A. Towing

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CRHA

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